

#21



RECEIVED

JUN 07 2002

1600

TECH CENTER 1600/2900

## RAW SEQUENCE LISTING

DATE: 05/29/2002

PATENT APPLICATION: US/09/313,434C

TIME: 17:41:18

Input Set : A:\50206.432001.SEQLIST.TXT

Output Set: N:\CRF3\05292002\I313434C.raw

ENTERED

4 <110> APPLICANT: Podolsky, Daniel K.  
 6 <120> TITLE OF INVENTION: Intestinal Trefoil Proteins  
 9 <130> FILE REFERENCE: 50206/432001  
 11 <140> CURRENT APPLICATION NUMBER: US 09/313,434C  
 12 <141> CURRENT FILING DATE: 1999-05-17  
 14 <150> PRIOR APPLICATION NUMBER: US 08/631,469  
 15 <151> PRIOR FILING DATE: 1996-04-12  
 17 <150> PRIOR APPLICATION NUMBER: US 08/191,352  
 18 <151> PRIOR FILING DATE: 1994-02-02  
 20 <150> PRIOR APPLICATION NUMBER: US 08/037,741  
 21 <151> PRIOR FILING DATE: 1993-03-25  
 23 <150> PRIOR APPLICATION NUMBER: US 07/837,192  
 24 <151> PRIOR FILING DATE: 1992-02-13  
 26 <150> PRIOR APPLICATION NUMBER: US 07/655,965  
 27 <151> PRIOR FILING DATE: 1991-02-14  
 29 <160> NUMBER OF SEQ ID NOS: 21  
 31 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 33 <210> SEQ ID NO: 1  
 34 <211> LENGTH: 431  
 35 <212> TYPE: DNA  
 36 <213> ORGANISM: Rattus norvegicus  
 38 <220> FEATURE:  
 39 <221> NAME/KEY: CDS  
 40 <222> LOCATION: (18)...(260)  
 42 <400> SEQUENCE: 1

43 gaagtttgcg tgctgcc atg gag acc aga gcc ttc tgg ata acc ctg ctg 50  
 44 Met Glu Thr Arg Ala Phe Trp Ile Thr Leu Leu  
 45 1 5 10  
 47 ctg gtc ctg gtt gct ggg tcc tcc tgc aaa gcc cag gaa ttt gtt ggc 98  
 48 Leu Val Leu Val Ala Gly Ser Ser Cys Lys Ala Gln Glu Phe Val Gly  
 49 15 20 25  
 51 cta tct cca agc caa tgt atg gcg cca aca aat gtc agg gtg gac tgt 146  
 52 Leu Ser Pro Ser Gln Cys Met Ala Pro Thr Asn Val Arg Val Asp Cys  
 53 30 35 40  
 55 aac tac ccc act gtc aca tca gag cag tgt aac aac cgt ggt tgc tgt 194  
 56 Asn Tyr Pro Thr Val Thr Ser Glu Gln Cys Asn Asn Arg Gly Cys Cys  
 57 45 50 55  
 59 ttt gac tcc agc atc cca aat gtg ccc tgg tgc ttc aaa cct ctg caa 242  
 60 Phe Asp Ser Ser Ile Pro Asn Val Pro Trp Cys Phe Lys Pro Leu Gln  
 61 60 65 70 75  
 63 gag aca gaa tgt aca ttt tgaagctgtc caggctccag gaagggagct 290  
 64 Glu Thr Glu Cys Thr Phe  
 65 80

RECEIVED

JUN 07 2002

TECH CENTER 1600/2900

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/313,434C

DATE: 05/29/2002

TIME: 17:41:19

Input Set : A:\50206.432001.SEQLIST.TXT

Output Set: N:\CRF3\05292002\I313434C.raw

67 ccacaccctg gactcttgct gatggtagtg gccagggta acactcacc ctgatctgct 350  
 68 ccctcgcgcc ggccaatata ggagctggga gtccagaaga ataaagacct tacagtcagc 410  
 69 acaaggctgt tctaattgcg g 431

71 &lt;210&gt; SEQ ID NO: 2

72 &lt;211&gt; LENGTH: 81

73 &lt;212&gt; TYPE: PRT

74 &lt;213&gt; ORGANISM: Rattus norvegicus

76 &lt;400&gt; SEQUENCE: 2

77 Met Glu Thr Arg Ala Phe Trp Ile Thr Leu Leu Val Leu Val Ala

78 1 5 10 15

79 Gly Ser Ser Cys Lys Ala Gln Glu Phe Val Gly Leu Ser Pro Ser Gln

80 20 25 30

81 Cys Met Ala Pro Thr Asn Val Arg Val Asp Cys Asn Tyr Pro Thr Val

82 35 40 45

83 Thr Ser Glu Gln Cys Asn Asn Arg Gly Cys Cys Phe Asp Ser Ser Ile

84 50 55 60

85 Pro Asn Val Pro Trp Cys Phe Lys Pro Leu Gln Glu Thr Glu Cys Thr

86 65 70 75 80

87 Phe

91 &lt;210&gt; SEQ ID NO: 3

92 &lt;211&gt; LENGTH: 400

93 &lt;212&gt; TYPE: DNA

94 &lt;213&gt; ORGANISM: Homo sapiens

96 &lt;220&gt; FEATURE:

97 &lt;223&gt; OTHER INFORMATION: Oligonucleotide for PCR

W--&gt; 99 &lt;221&gt; NAME/KEY: CDS

W--&gt; 100 &lt;222&gt; LOCATION: (2)...(223)

102 &lt;400&gt; SEQUENCE: 3

103 g atg ctg ggg ctg gtc ctg gcc ttg ctg tcc tcc agc tct gct gag gag 49

104 Met Leu Gly Leu Val Leu Ala Leu Leu Ser Ser Ser Ser Ala Glu Glu

105 1 5 10 15

107 tac gtg ggc ctg tct gca aac cag tgt gcc gtg ccg gcc aag gac agg 97

108 Tyr Val Gly Leu Ser Ala Asn Gln Cys Ala Val Pro Ala Lys Asp Arg

109 20 25 30

111 gtg gac tgc ggc tac ccc cat gtc acc ccc aag gag tgc aac aac cgg 145

112 Val Asp Cys Gly Tyr Pro His Val Thr Pro Lys Glu Cys Asn Asn Arg

113 35 40 45

115 ggc tgc tgc ttt gac tcc agg atc cct gga gtg cct tgg tgt ttc aag 193

116 Gly Cys Cys Phe Asp Ser Arg Ile Pro Gly Val Pro Trp Cys Phe Lys

117 50 55 60

119 ccc ctg cag gaa gca gaa tgc acc ttc tga ggcacctcca gctgccctg 243

120 Pro Leu Gln Glu Ala Glu Cys Thr Phe \*

121 65 70

123 ggatgcaggc tgagcaccct tgcccggctg tgattgctgc caggcactgt tcattctcagt 303

124 ttttctgtcc ctttgctccc ggcaagcttt ctgctgaaag ttcatatctg gagcctgatg 363

125 tcttaacgaa taaaggctccc atgctccacc cgaaaaa 400

127 &lt;210&gt; SEQ ID NO: 4

128 &lt;211&gt; LENGTH: 73

129 &lt;212&gt; TYPE: PRT

## RAW SEQUENCE LISTING

DATE: 05/29/2002

PATENT APPLICATION: US/09/313,434C

TIME: 17:41:19

Input Set : A:\50206.432001.SEQLIST.TXT

Output Set: N:\CRF3\05292002\I313434C.raw

```

130 <213> ORGANISM: Homo sapiens
132 <400> SEQUENCE: 4
133 Met Leu Gly Leu Val Leu Ala Leu Leu Ser Ser Ser Ser Ala Glu Glu
134 1 5 10 15
135 Tyr Val Gly Leu Ser Ala Asn Gln Cys Ala Val Pro Ala Lys Asp Arg
136 20 25 30
137 Val Asp Cys Gly Tyr Pro His Val Thr Pro Lys Glu Cys Asn Asn Arg
138 35 40 45
139 Gly Cys Cys Phe Asp Ser Arg Ile Pro Gly Val Pro Trp Cys Phe Lys
140 50 55 60
141 Pro Leu Gln Glu Ala Glu Cys Thr Phe
142 65 70
145 <210> SEQ ID NO: 5
146 <211> LENGTH: 10
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Oligonucleotide for PCR
153 <400> SEQUENCE: 5
154 gggcggccgc 10
156 <210> SEQ ID NO: 6
157 <211> LENGTH: 21
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Oligonucleotide for PCR
164 <400> SEQUENCE: 6
165 gtacattctg tctcttgca a 21
167 <210> SEQ ID NO: 7
168 <211> LENGTH: 24
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Oligonucleotide for PCR
175 <400> SEQUENCE: 7
176 taaccctgct gctgctggc ctgg 24
178 <210> SEQ ID NO: 8
179 <211> LENGTH: 21
180 <212> TYPE: DNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Oligonucleotide for PCR
186 <400> SEQUENCE: 8
187 gtttgcgctgc tgccatggag a 21
189 <210> SEQ ID NO: 9
190 <211> LENGTH: 21
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/313,434C

DATE: 05/29/2002

TIME: 17:41:19

Input Set : A:\50206.432001.SEQLIST.TXT

Output Set: N:\CRF3\05292002\I313434C.raw

```

195 <223> OTHER INFORMATION: Oligonucleotide for PCR
197 <400> SEQUENCE: 9
198 ccgcaattag aacagccttg t 21
200 <210> SEQ ID NO: 10
201 <211> LENGTH: 25
202 <212> TYPE: DNA
203 <213> ORGANISM: Artificial Sequence
205 <220> FEATURE:
206 <223> OTHER INFORMATION: Oligonucleotide for PCR
208 <400> SEQUENCE: 10
209 gcagtgtaac aaccgtggtt gctgc 25
211 <210> SEQ ID NO: 11
212 <211> LENGTH: 60
213 <212> TYPE: PRT
214 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 11
217 Glu Ala Gln Thr Glu Thr Cys Thr Val Ala Pro Arg Glu Arg Gln Asn
218 1 5 10 15
219 Cys Gly Phe Pro Gly Val Thr Pro Ser Gln Cys Ala Asn Lys Gly Cys
220 20 25 30
221 Cys Phe Asp Asp Thr Val Arg Gly Val Pro Trp Cys Phe Tyr Pro Asn
222 35 40 45
223 Thr Ile Asp Val Pro Pro Glu Glu Glu Cys Glu Phe
224 50 55 60
227 <210> SEQ ID NO: 12
228 <211> LENGTH: 62
229 <212> TYPE: PRT
230 <213> ORGANISM: Homo sapiens
232 <400> SEQUENCE: 12
233 Glu Lys Pro Ala Ala Cys Arg Cys Ser Arg Gln Asp Pro Lys Asn Arg
234 1 5 10 15
235 Val Asn Cys Gly Phe Pro Gly Ile Thr Ser Asp Gln Cys Phe Thr Ser
236 20 25 30
237 Gly Cys Cys Phe Asp Ser Gln Val Pro Gly Val Pro Trp Cys Phe Lys
238 35 40 45
239 Pro Leu Pro Ala Gln Glu Ser Glu Glu Cys Val Met Glu Val
240 50 55 60
243 <210> SEQ ID NO: 13
244 <211> LENGTH: 318
245 <212> TYPE: DNA
246 <213> ORGANISM: Homo sapiens
248 <220> FEATURE:
249 <221> NAME/KEY: CDS
250 <222> LOCATION: (1)...(318)
252 <400> SEQUENCE: 13
253 gag aaa ccc tcc ccc tgc cag tgc tcc agg ctg agc ccc cat aac agg 48
254 Glu Lys Pro Ser Pro Cys Gln Cys Ser Arg Leu Ser Pro His Asn Arg
255 1 5 10 15
257 acg aac tgc ggc ttc cct gga atc acc agt gac cag tgt ttt gac aat 96

```

## RAW SEQUENCE LISTING

DATE: 05/29/2002

PATENT APPLICATION: US/09/313,434C

TIME: 17:41:19

Input Set : A:\50206.432001.SEQLIST.TXT

Output Set: N:\CRF3\05292002\I313434C.raw

```

258 Thr Asn Cys Gly Phe Pro Gly Ile Thr Ser Asp Gln Cys Phe Asp Asn
259          20          25          30
261 gga tgc tgt ttc gac tcc agt gtc act ggg gtc ccc tgg tgt ttc cac 144
262 Gly Cys Cys Phe Asp Ser Ser Val Thr Gly Val Pro Trp Cys Phe His
263          35          40          45
265 ccc ctc cca aag caa gag tcg gat cag tgc gtc atg gag gtc tca gac 192
266 Pro Leu Pro Lys Gln Glu Ser Asp Gln Cys Val Met Glu Val Ser Asp
267          50          55          60
269 aga aga aac tgt ggc tac ccg ggc atc agc ccc gag gaa tgc gcc tct 240
270 Arg Arg Asn Cys Gly Tyr Pro Gly Ile Ser Pro Glu Glu Cys Ala Ser
271 65          70          75          80
273 cgg aag tgc tgc ttc tcc aac ttc atc ttt gaa gtg ccc tgg tgc ttc 288
274 Arg Lys Cys Cys Phe Ser Asn Phe Ile Phe Glu Val Pro Trp Cys Phe
275          85          90          95
277 ttc ccg aac tct gtg gaa gac tgc cat tac 318
278 Phe Pro Asn Ser Val Glu Asp Cys His Tyr
279          100          105
282 <210> SEQ ID NO: 14
283 <211> LENGTH: 105
284 <212> TYPE: PRT
285 <213> ORGANISM: Homo sapiens
287 <400> SEQUENCE: 14
288 Lys Pro Ser Pro Cys Gln Cys Ser Arg Leu Ser Pro His Asn Arg Thr
289 1          5          10          15
290 Asn Cys Gly Phe Pro Gly Ile Thr Ser Asp Gln Cys Phe Asp Asn Gly
291          20          25          30
292 Cys Cys Phe Asp Ser Ser Val Thr Gly Val Pro Trp Cys Phe His Pro
293          35          40          45
294 Leu Pro Lys Gln Glu Ser Asp Gln Cys Val Met Glu Val Ser Asp Arg
295          50          55          60
296 Arg Asn Cys Gly Tyr Pro Gly Ile Ser Pro Glu Glu Cys Ala Ser Arg
297 65          70          75          80
298 Lys Cys Cys Phe Ser Asn Phe Ile Phe Glu Val Pro Trp Cys Phe Phe
299          85          90          95
300 Pro Asn Ser Val Glu Asp Cys His Tyr
301          100          105
304 <210> SEQ ID NO: 15
305 <211> LENGTH: 540
306 <212> TYPE: DNA
307 <213> ORGANISM: Homo sapiens
309 <220> FEATURE:
310 <221> NAME/KEY: CDS
311 <222> LOCATION: (41)...(292)
312 <223> OTHER INFORMATION:
314 <400> SEQUENCE: 15
315 atccctgact cggggtcgcc ttggagcag agaggaggca atg gcc acc atg gag 55
316          Met Ala Thr Met Glu
317          1          5
319 aac aag gtg atc tgc gcc ctg gtc ctg gtg tcc atg ctg gcc ctc ggc 103

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/313,434C

DATE: 05/29/2002

TIME: 17:41:20

Input Set : A:\50206.432001.SEQLIST.TXT

Output Set: N:\CRF3\05292002\I313434C.raw

L:99 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:100 M:281 W: Numeric Fields not Ordered, <222> Sort in ascending order!